

Keystone Do Nows

Wednesday, September 12, 2012

Name: _____ Period: _____

Cut out the problems below and arrange in the appropriate columns. You may find using your formula sheet will be helpful.

$$(3+x) - 6 \stackrel{?}{=} 3 + (x-6)$$

This equation is TRUE because order and signs stayed the same. The only difference is the parentheses.

$$6 = -\frac{1}{2}x$$

$$2(6) = 2\left(-\frac{1}{2}\right)x$$
$$\boxed{12 = x}$$

$$4(3+x) \stackrel{?}{=} 4 \cdot 3x$$

Yes, $4(3+x)$ is equal to $4 \cdot 3x$
 $12x = 12x$

$$\frac{1}{3}x = 5$$

$$3\left(\frac{1}{3}x\right) = 3(5)$$
$$\boxed{x = 15}$$

$$\begin{array}{r} -8 - x = 0 \\ +x \quad +x \\ \hline \end{array}$$

$$\boxed{-8 = x}$$

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Thursday, September 14, 2012

Name: _____ Period: _____

Cut out the problems below and arrange in the appropriate columns. You may find using your formula sheet will be helpful.

Find the slope of the line that passes through the points (2, -8) and (3, 4).

$$m = \frac{y_2 - y_1}{x_2 - x_1} = \frac{4 - (-8)}{3 - 2} = \frac{4 + 8}{1} = \frac{12}{1} = 12$$

Use the points to write the equation of the line in Point-Slope Form. (4, 0) and (-1, 3)

$$m = \frac{y_2 - y_1}{x_2 - x_1} = \frac{3 - 0}{-1 - 4} = \frac{3}{-5} = -\frac{3}{5}$$

$$(y - y_1) = m(x - x_1)$$

$$(y - 0) = -\frac{3}{5}(x - 4)$$

Use the points to write the equation of the line in Point-Slope Form. (2, -1) and (5, 7)

$$m = \frac{y_2 - y_1}{x_2 - x_1} = \frac{7 - (-1)}{5 - 2} = \frac{7 + 1}{3} = \frac{8}{3}$$

$$(y - y_1) = m(x - x_1)$$

$$(y - 2) = \frac{8}{3}(x - -1)$$

$$y = mx + b$$

$$m = \text{slope}$$

$$b = \text{x-intercept}$$

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Friday, September 15, 2012

Name: _____ Period: _____

Cut out the problems below and arrange in the appropriate columns. You may find using your formula sheet will be helpful.

The equation for area is:

$$A = lwh$$

The length of this classroom is 27 feet and the area is 800 square feet. What is the width?

$$\begin{aligned} A &= lw \\ 800 &= 27w \\ \frac{800}{27} &= \frac{27w}{27} \\ 29.63 &= w \end{aligned}$$

The width is 29.63 ft.

The area of a rug is 80 ft.^2 . The width is 8 ft. and the length is 10 ft. Can I also find the volume? Explain your answer.

Yes, you can find the volume.
 $80 \cdot 8 \cdot 10 = 6400 \text{ ft}^3$

Find the volume of the rectangular prism with the following dimensions:

$$\begin{aligned} l &= 5 \\ w &= 2 \cdot l \\ h &= 3 \cdot w \end{aligned}$$

$$V = lwh = 5 \cdot (2l) \cdot (3w)$$

You can't solve this problem. Not enough info.

Please do not write on this page!

True

False